Georgia Department of Natural Resources
205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

December 29, 1986

Mr. W. R. Woodall, Jr.
Manager
Environmental Affairs
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Re: Plant Scherer
NPDES Permit No. GA 0035564

Dear Mr. Woodall:

We have received your December 2, 1986 letter regarding the November 4, 1986 EPA comment letter. We have also discussed our approach on the next draft permit with Mr. George Guill of your staff on December 12, 1986.

It appears that an acceptable final permit can be written if Georgia Power Company can avoid simultaneous discharge of chlorine in cooling tower blowdown during normal biofouling control. Mr. Guill indicated that this may be possible, and if so, we request that your May 5, 1986 discussion of chlorination practices be revised accordingly.

The enclosed draft permit has been prepared in conformance with the requirements of alternative No. 1 in EPA's November 4, 1986 letter. This permit will allow asiatic clam control if chlorine discharges are minimized. Dechlorination will not be considered until water quality impacts have been investigated and appropriate chlorine discharge levels determined.

Please review the draft and respond by January 19, 1987.

Sincerely,

Harold F. Reheis

Harold F. Reheis, P.E.
Assistant Director

HFR:thk
Enclosure

cc: Mr. George Guill (w/enclosure)

cc: U. S. Environmental Protection Agency

PERMIT NO. GA 0035564

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STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Federal Act," and the Rules and Regulations promulgated pursuant to each of these Acts,

GEORGIA POWER COMPANY
Post Office Box 4545
Atlanta, Georgia 30302

is authorized to discharge from a facility located at

Scherer Steam Electric Generating Station
Georgia Highway 23
Juliette, Monroe County, Georgia 31406

to receiving waters Berry Creek and Rum Creek to the Ocmulgee River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on the date signed by the Director of the Environmental Protection Division.

This permit and the authorization to discharge shall expire at midnight, April 30, 1992.

Signed this _____ **day of** _____ .

Director,
Environmental Protection Division

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01 - Detention Pond (I Pond) pFinal Discharge to Berry Creek; 01D - I Pond Bottom Drain.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/1)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	-	90	1/Month	Grab	Final Discharge or Bottom Drain
Total Residual Chlorine (TRC)	-	-	-	-	3/day(1)	Grab	Final Discharge or Bottom Drain

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample at the final discharge to Berry Creek or at the bottom drain when discharging.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring and reporting of TRC is required only during continuous service water chlorination for controlling asiatic clams.

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2. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01A - Cooling Tower Blowdown for Units 1, 2, 3 and 4.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1) Daily Max.	Avg.	Inst.Max.	Monitoring Requirements Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-
Free Available Chlorine (FAC)	-	0.2	0.5	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Blowdown Line
TRC Time (minutes/day/unit)	120	-	-	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Service Water
Total Chromium	0.2	-	-	1/Quarter	Grab	Blowdown Line
Total Zinc	1.0	-	-	1/Quarter	Grab	Blowdown Line

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before the cooling tower blowdown combines with waste streams from other sources.

All numerical discharge limitations apply to the individual cooling tower blowdown from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III, B.4., 5., and 6., beginning on page 19.

3. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01B- Ash Transport Water (includes 02H Wastewater Basin Low Volume Waste).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location(1)
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Bleedoff
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Bleedoff

(1) Samples are to be taken upstream of the final detention pond (I Pond) at the ash transport bleedoff line.

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4. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02J - Settling Pond Emergency Overflow to Lake Juliette (Ash Transport Water).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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5. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02K - Units 1 and 2 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Other Units(Specify) (mg/l)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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6. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02L - Units 3 and 4 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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7. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 03 - Service Water Final Discharge to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify)		Measurement	Sample	
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Frequency	Type	Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Temperature	-	-	-	-	1/Week	Grab	(1)
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Grab	Final Discharge

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Temperature will be monitored and reported for the plant intake and the final discharge. The difference ("ΔT") between the intake and discharge temperature shall be calculated and entered on the monitoring report.

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8. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 04 and 05 - Units 1 and 2 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before the cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

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9. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 06 and 07 - Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before the cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

Note: EPD as used herein means the Division of Environmental Protection of the Department of Natural Resources.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on an Operation Monitoring Report (Form WQ 1.45), postmarked no later than the 21st day of the month following the completed reporting period. The first report is due on
The EPD may require reporting of additional monitoring results by written notification. Signed copies of these, and all other reports required herein, shall be submitted to the following address:

Georgia Environmental Protection Division
Industrial Wastewater Program
205 Butler Street, S.E., Floyd Towers East
Suite 1070
Atlanta, Georgia 30334

3. Definitions

a. The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

b. The "daily maximum" discharge means the total discharge by weight during any calendar day.

c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.

d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

e. "Weighted by flow value" means the summation of each sample concentration times its respective flow in convenient units divided by the sum of the respective flows.

f. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Federal Act.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Operation Monitoring Report Form (WQ 1.45). Such increased monitoring frequency shall also be indicated. The EPD may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained by the permittee for a minimum of three (3) years, or longer if requested by the State Environmental Protection Division.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges or pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the EPD of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Water Protection Branch of EPD with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage, runoff, or infiltration would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. The permittee shall monitor all overflows and bypasses in the sewer and treatment system. A record of each overflow and bypass shall be kept with information on the location, cause, duration, and peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

b. Halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Water Protection Branch of EPD.

3. Availability of Reports

Except for data determined by the Director of EPD to be confidential under Section 16 of the State Act or the Regional Administrator of the U. S. Environmental Protection Agency under Section 308 of the Federal Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Atlanta office of the EPD. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 22(b) of the State Act.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120 (D.D.C. 1976), if the effluent limitation so issued:

(1) is different in conditions or more stringent than any effluent limitation in the permit; or

(2) controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

Permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by any action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Available Technology Economically Achievable

Notwithstanding Part II, B-4 above, if an applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 301(b)2 of the Federal Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

14. The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

PART III

A. PREVIOUS PERMITS

1. All previous State water quality permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Water Pollution Control Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. SPECIAL REQUIREMENTS

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

2. Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also. The treatment and disposal procedures shall be discussed in the bi-annual flow characterization study.

3. The quantity of pollutants discharged in metal cleaning waste shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored 1/week by grab sampling when a discharge is occurring.

Effluent Characteristic	Discharge Limitation (mg/l)	
	Daily Average	Daily Maximum
Total Suspended Solids	30	100
Oil and Grease	15	20
Copper	1.0	1.0
Iron	1.0	1.0

4. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot operate at or below this level of chlorination. The permittee has demonstrated the need to continuously chlorinate the service water system to control asiatic clams. The service water will be chlorinated periodically from April through October, five days per month for 24 hours per day at an initial level of 1.0 mg/l FAC. This chlorination practice will result occasionally in the discharge of FAC or TRC from each cooling tower simultaneously and for more than 2 hours per day. The permittee must reduce the chlorine discharge if possible and shall perform a study to determine the minimum practicable chlorine levels and periods of continuous chlorination for the service water system to adequately control asiatic clams. A plan of study must be submitted to the EPD within 90 days after the effective date of the permit and implemented upon approval.

5. In accordance with 40 CFR 423.11(k), the free available chlorine (FAC) average means the average over any individual chlorine release period of 2 hours per day per unit. The FAC maximum is the instantaneous maximum which may occur at any time. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC discharges. The results shall be reported in a suitably concise form beginning with the first scheduled Operation Monitoring Report (OMR) and continuing on each OMR thereafter.

6. In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in outfalls 01A, 04, 05, 06, and 07 (cooling tower blowdowns or overflows).

7. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.

8. The Director may modify any effluent limitation upon request of the permittee if such limitation is covered by an approved variance or by an amendment to the Federal Water Pollution Control Act.

9. The permittee shall determine the flow of the various waste streams and submit this determination to the Director once every two years.

10. All sewage treatment plants (STP) must be properly operated and maintained. This applies to 02A Main STP, 02B Coal Handling STP, 02C Unit 1 Temporary STP, and 02D Unit 2 Temporary STP.

11. Every two years, the permittee shall review the water treatment chemicals other than chlorine discharged to State waters. This includes, but is not limited to microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturers' instructions unless other requirements are imposed by EPD.

    As part of the flow characterization study of Item 13. below, the permittee shall submit to EPD a current inventory of all chemicals discharged during the previous twenty-four months.

12. Forms other than Form WQ 1.45 may be used for the quarterly Operation Monitoring Report upon approval by the EPD.

13. Summary of flow characterization study requirements from preceding pages:

    a. Outfalls 04, 05, 06, and 07 stop log leakage flow and effluent characteristics.

    b. Metal cleaning waste treatment and disposal procedures.

    c. Flow determination of various waste streams.

    d. Water treatment chemical inventory.

    e. Cooling tower blowdown priority pollutant certification per 40 CFR 423.13(d)(3).

Summary of NPDES Permit Rationale

Name Georgia Power Company - Plant Scherer NPDES No. GA 0035564

Location Monroe County Major Discharge _____

Minor Discharge X Date 12/29/86 Prepared by T. E. Hopkins

Draft permit is first issuance _____ reissuance with no modifications from previous permit _____ modification of existing permit X.

Discharge is industrial X municipal _____ privately owned (domestic wastewater only) _____. If industrial, point source category is 423 Steam Electric Power Generating subcategory is N/A production level is 3,272 megawatts, SIC code is 4911.

Facility located on stream segment that is and the basis for derivation of limitation is:

_____ Stream water quality limited
- _____ Based on water quality model
- _____ Based on instream calculation at 7 day, 10 year low flow

X Stream effluent limited
- X Based on promulgated guidelines
- _____ Based on plant's demonstrated performance
- _____ Based on demonstrated technology

Discussion:

See Following Pages:

GEORGIA POWER - PLANT SCHERER
SUMMARY OF NPDES PERMIT RATIONALE
DISCUSSION
GA 0035564

This permit is prepared in response to USEPA Region IV's January 15, 1986 letter and a revised partial Form 2C submitted by Georgia Power on May 5, 1986. Units 3 and 4 are included as existing sources. See also EPA's 7/29/86 and 11/4/86 letters and EPD's 9/9/86 and 12/29/86 responses.

01 I Pond Final Discharge and 01D I Pond Bottom Drain to Berry Creek: A daily max. TSS of 90 mg/l should be adequate to protect State waters and begin a track record at this outfall. A pH of 6.0-9.0 is required by 40 CFR 423. TRC monitoring is added to determine chlorine discharges during continuous service water chlorination for asiatic clam control.

01A Cooling Tower Blowdown for Units 1, 2, 3, 4: These are 40 CFR 423 regulated waste streams except under certain conditions as discussed. All requirements are derived directly from the Federal regulations. The "floating solids/visible foam" statement is deleted from this and other internal waste stream permit pages. Blowdown losses are made up from the service water system which is to be continuously chlorinated to control asiatic clams. See Part III. B. 4., Special Requirements. During clam control, chlorine will be discharged simultaneously from more than one unit and for more than 2 hours/day/unit. Allowable chlorine discharge concentration limits under these conditions is beyond the scope of the regulations. It is our best professional judgement (BPJ) that these chlorine (FAC) concentrations will not significantly exceed 0.2 mg/l average, 0.5 mg/l maximum at 01A. Further, the 01A waste stream passes through I-Pond (outfall 01) where chlorine dissipation will occur prior to entering the receiving stream. Therefore, specific numerical limits are not being established at this time. However, the chlorine minimization requirements of Part III. B. 4. and the permit modification provision of Part II. B. 8. (which is to be implemented as indicated in the 03 discussion below) will adequately protect Berry Creek. Finally, priority pollutant certification will be required every two years in the flow characterization study.

01B Ash Transport Water (includes 02H, Wastewater Basin Low Volume Wastes): On May 5, 1986, Georgia Power submitted information which enables an ash pond volume test calculation per the August 22, 1985 USEPA Guidance Memo. The calculation (attached) indicates that dilution does not occur and the 40 CFR 423 limitations can be applied without reduction.

02J Settling Pond Emergency Overflow to Lake Juliette: This may be considered a discharge of ash transport water to a water of the U.S. The applicable limits for TSS, Oil and Grease, and pH are taken from 40 CFR 423.

02K Wastewater Basin Emergency Overflow: This may be considered a discharge of low volume wastewater to Lake Juliette, a water of the U.S. Therefore, TSS, O&G, and pH limits are taken from 40 CFR 423. This basin serves Units 1 and 2.

02L Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes): This basin serves Units 3 and 4. Permit requirements are identical to 02K above.

03 Service Water Final Discharge to Lake Juliette: This discharge is analogous to once-through, non-contact cooling water. The pollutants which are to be regulated are temperature and chlorine. The discharge consists of miscellaneous cooling water flows and pump bleedoff, none of which pass through the main condensers. This waste stream is not covered in 40 CFR 423, so effluent limits are based on BPJ. Georgia Power expects no significant rise in temperature and will verify by measurements in the lake. This assumption is consistent with our experience with other once-through, non-contact, non-condenser cooling waters. Therefore, periodic monitoring without limits is adequate. After sufficient monitoring data are obtained, we may add limits if W.Q. standards are being violated. Chlorine from control of normal biofouling and asiatic clams will be discharged at 03. Therefore, TRC monitoring will be imposed. This monitoring will document existing control of chlorination and discourage over-use. Reductions in TRC discharge will be required if EPD documents TRC toxicity in the receiving water. This approach is consistent with our developing statewide strategy for controlling and abating TRC toxicity.

04 and 05 Unit 1 and Unit 2 Cooling Tower Basin Overflows to Lake Juliette, including Basin Cleaning Wastes: Cooling tower basin overflows are analogous to cooling tower blowdowns, so limits for FAC, TRC, chrome and zinc are imposed from 40 CFR 423. Also, see above discussion in 01A regarding chlorine discharges during asiatic clam control. Similar requirements apply to 04, 05, 06, and 07. Basin cleaning wastes are low volume wastes, so the 423 limits for TSS and O&G are used. These waste streams discharge directly to a water of the U.S., requiring pH limitations per Part 423. A compliance inspection verified that stop log leakage is insignificant. No monitoring is required and periodic review in the bi-annual flow charac. study is adequate to control leakage. Priority pollutant certification is allowed as in the provisions of 01A Cooling Tower Blowdown.

06 and 07 Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond): Limitations for these waste streams are written as 04 and 05, except that "I Pond" is not a water of the U.S. Therefore, pH monitoring is not required. The pH of the final discharge is limited at 01/01D, the "I Pond" outfalls.

Special Requirements See Part III. B

1. PCB's: The statement from 423 is repeated.

2. & 3. Metal Cleaning Wastes: The BPT/BAT provisions are incorporated from 423. These wastes are not discharged to a U.S. water. Therefore, pH is not limited except at the final plant discharge.

4. FAC and TRC time and simultaneous discharge provisions: Part 413 is cited. The company has demonstrated the need to simultaneously discharge chlorine for more than 2 hours/day/unit during service water chlorination for clam control. The BAT numerical limitations for FAC in cooling tower blowdown (01A) do not apply under these circumstances. However, increased monitoring and chlorine minimization will protect water quality, as contemplated for verification by EPD toxics monitoring. The company will study and implement the most feasible chlorine minimization early in the life of the permit. Further, the company must develop a new format for reporting time of FAC and TRC discharges.

5. The FAC average and instantaneous maximum are specified here per 40 CFR 423.

6. Priority pollutants shall be certified absent in all cooling tower blowdowns/overflows every 2 years.

7. Combined discharges: Part 423 is cited re mass-based limits.

8. Modifications: Expands Part II.B.4. to specify that the company may request changes to limits.

9. Flow characterization study: Studies are to be done every two years.

10. Sewage treatment plants: All STP's (02A, 02B, 02C, 02D) are to be operated properly. These plants do not discharge directly to a U.S. water.

11. Water treatment chemicals other than chlorine: These are to be inventoried every two years.

12. Use of alternate report forms may be allowed.

13. Periodic reports to be included with flow charac. studies:

    a) Stop log leakage

    b) Metal cleaning

    c) Flows

    d) Water treatment chemicals

    e) C.T. blowdown certification

6/19/86 TEH

Plant Scherer
Ash Transport Water Effluent Limitations
Outfall 01B

Available Information

02H	Low Volume Wastes	8200 gpm =	11.81 MGD
02	Ash Transport Water	36,090 gpm (net) =	51.97
02E	Coal Pile Runoff	2,500 gpm =	3.6
02C, D	STP's	34 gpm ≈	0
			67.38 MGD

Ash Pond Area = Total Runoff Area = 490 acres

10 year 24-hour storm (10Y24H) = 5.8 inches
Annual rainfall = 44.77 inches

Calculations

Runoff from 10Y24H storm at a runoff coefficient of 1.0

= (490 acres)(5.8 inches)(1 ft/12 in)(43560 ft²/acre)(7.48 gal/ft³)

= 77.2 MG

Total ash pond volume for use of alternate approach

= 144.6 MG

= 444 A-FT.

6/19/86 TEH

Case I

Ash pond water surface area (acres)	=	490
Average water depth when new	=	32.65 ft.
Subtract 2 units × 160 A-Ft/year × 4 years ÷ 490 acres	=	− 2.61 ft.
Average water depth available	=	30.0 ft.
Available volume	=	14,700 A-Ft

Since the pond volume exceeds the necessary storage volume of 444 A-Ft. required to use the alternate approach, only dry weather flows need to be used in calculating effluent limitations.

Sources	Flow (MGD)	Daily Average Limitations (mg/l) TSS	Daily Average Limitations (mg/l) O&G	Daily Maximum Limitations (mg/l) TSS	Daily Maximum Limitations (mg/l) O&G
Low Volume Wastes	11.81	30	15	100	20
Ash Transport Water	51.97	30	15	100	20
Flow Weighted Conc.	(63.78)	30	15	100	20
Effluent limitations for 01B		30	15	100	20

FISCAL YEAR 1987 NPDES PERMIT REVIEW
STATE: DW

FACILITY: Dr. Pepper Company - P/DAT Schedule

NPDES # : CA0135564

APPLICATION _____ DRAFT ✓ FINAL _____

____ NEW

____ MAJOR IND.

____ MAJOR MUN.

✓ MINOR PRI.

____ MODIFICATION (circle one: Major Ind/Mun. or Minor Pri.)

ROUTING: 1. DATE/RECEIVED 4/16/87

2. UNIT CHIEF RC 4/16

3. ASSIGNED TO Lisa DUE 4/26/87

4. UNIT CHIEF (If Problems)

5. PERMITS CLERK

6. FINALS (PCS then file), DRAFTS (file)

COMMENTS:

ACTION TO BE TAKEN: file - letter written

Darlene/Lisa 5/1/87

COMPLETED BY: DATE:

Georgia Department of Natural Resources

205 Butler Street, S.E., Suite 1252, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
404/656-3500

Minor - P

April 6, 1987

Mr. Jack E. Ravan
Regional Administrator
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

RE: Georgia Power Company
Plant Scherer
NPDES Permit No. GA0035564

DE...

We have reviewed your January 28, 1987 letter regarding the latest draft permit for Plant Scherer. We have carefully considered your suggestions. We have incorporated all the significant changes in the attached final permit. Please refer to page 3 (01A), page 9 (04 and 05), page 10 (06 and 07), and Part III. B.4. Special Requirements on page 19.

The assistance provided by your office in this matter has been greatly appreciated. We look forward to expeditious re-issuance of the remaining power plant permits during 1987.

Sincerely,

J. Leonard Ledbetter

J. Leonard Ledbetter
Commissioner

JLL:thb

Attachment

cc: Mr. W. R. Woodall, Jr.

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-6526

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

Georgia Power
the southern electric system

W. R. Woodall, Jr.
Manager
Environmental Affairs

March 5, 1987

PLANT SCHERER
NPDES Permit No. GA 0035564

Mr. H. F. Reheis, P.E.
Assistant Director
Environmental Protection Division
Georgia Department of Natural Resources
205 Butler Street, S.E.
Floyd Towers East
Atlanta, Georgia 30334

Dear Mr. Reheis:

In your December 29, 1986 letter, you requested that we revise our May 5, 1986 discussion of our proposed chlorination practices at Plant Scherer. Based on the Draft NPDES permit issued with that letter and subsequent discussion with your staff, we submit the following modified chlorination proposal.

Georgia Power Company no longer plans to install and utilize dechlorination equipment on any of the Plant Scherer discharges. Therefore, all references to dechlorination and associated monitoring activities in the May 5, 1986 letter are rescinded.

We still propose to conduct the Corbicula control chlorination program as previously described. We do not plan to chlorinate the service water system nor the condenser/cooling tower systems for normal biofouling control at the same time that chlorination for Corbicula control is being conducted.

Normal service water and condenser/cooling tower chlorination will be performed approximately one hour per day per unit with no simultaneous discharge of FAC and/or TRC from the cooling tower blowdowns. Chlorine residuals for normal biofouling control will be within permit limits at the cooling tower blowdown and will not exceed two hours per day per unit for TRC.

We also have two comments on the December 29, 1986 Draft NPDES permit. On page 10 of 21, OSN 06 and 07, the first paragraph of the narrative, the second sentence, states "FAC, TRC, chromium, zinc and ph are required for cooling tower overflow. . .". The requirement for pH should be deleted because this is still an internal waste stream at this point and pH is monitored at OSN 01 - Final Plant Discharge to Berry Creek.

Page 19 of 21, Special Requirement 4 states that "The service water will be chlorinated periodically from April through October, . . .". Because these are general date periods we request that the wording of this requirement be changed as follows:

"The service water will be chlorinated periodically during times of the year when the presence of Corbicula in the intake water is likely to occur,. . ."

I hope that this clarification of our chlorination practices and incorporation of our comments will produce a mutually acceptable permit.

If you have questions or comments, please advise.

Yours very truly,

W. R. Woodall, Jr.

GNG:mp

cc: Mr. J. C. Dozier
Mr. T. E. Hopkins

PERMIT NO. GA 0035564

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Federal Act," and the Rules and Regulations promulgated pursuant to each of these Acts,

GEORGIA POWER COMPANY
Post Office Box 4545
Atlanta, Georgia 30302

is authorized to discharge from a facility located at

Scherer Steam Electric Generating Station
Georgia Highway 23
Juliette, Monroe County, Georgia 31406

to receiving waters Berry Creek and Rum Creek to the Ocmulgee River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on April 6, 1987.

This permit and the authorization to discharge shall expire at midnight, March 16, 1992.

Signed this 6th **day of** April, 1987.

Director,
Environmental Protection Division

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01 - Detention Pond (I Pond) Final Discharge to Berry Creek; 01D - I Pond Bottom Drain.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	-	90	1/Month	Grab	Final Discharge or Bottom Drain
Total Residual Chlorine (TRC)	-	-	-	-	3/day(1)	Grab	Final Discharge or Bottom Drain

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample at the final discharge to Berry Creek or at the bottom drain when discharging.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring and reporting of TRC is required only during continuous service water chlorination for controlling asiatic clams.

2. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01A - Cooling Tower Blowdown for Units 1, 2, 3 and 4.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1) Daily Max.	Avg.	Inst.Max.	Monitoring Requirements Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-
Free Available Chlorine (FAC)	-	0.2	0.5	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Blowdown Line
TRC Time (minutes/day/unit)	120	-	-	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Service Water
Total Chromium	0.2	-	-	1/Quarter	Grab	Blowdown Line
Total Zinc	1.0	-	-	1/Quarter	Grab	Blowdown Line

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower blowdown combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower blowdown from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III, B.4., 5., and 6., beginning on page 19.

3. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01B- Ash Transport Water (includes 02H Wastewater Basin Low Volume Waste).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location(1)
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Bleedoff
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Bleedoff

(1) Samples are to be taken upstream of the final detention pond (I Pond) at the ash transport bleedoff line.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

4. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02J - Settling Pond Emergency Overflow to Lake Juliette (Ash Transport Water).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

5. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02K - Units 1 and 2 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

6. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02L - Units 3 and 4 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Other Units(Specify) (mg/l)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

7. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 03 - Service Water Final Discharge to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Temperature	-	-	-	-	1/Week	Grab	(1)
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Grab	Final Discharge

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Temperature will be monitored and reported for the plant intake and the final discharge. The difference ("ΔT") between the intake and discharge temperature shall be calculated and entered on the monitoring report.

8. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 04 and 05 - Units 1 and 2 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-		-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, TRC Time, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

9. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 06 and 07 - Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-		-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

TSS and O & G are required for basin cleaning waste discharges. FAC, TRC, TRC Time, chromium, and zinc are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

Note: EPD as used herein means the Division of Environmental Protection of the Department of Natural Resources.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on an Operation Monitoring Report (Form WQ 1.45), postmarked no later than the 21st day of the month following the completed reporting period. The first report is due on July 21, 1987.
The EPD may require reporting of additional monitoring results by written notification. Signed copies of these, and all other reports required herein, shall be submitted to the following address:

Georgia Environmental Protection Division
Industrial Wastewater Program
205 Butler Street, S.E., Floyd Towers East
Suite 1070
Atlanta, Georgia 30334

3. Definitions

a. The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

b. The "daily maximum" discharge means the total discharge by weight during any calendar day.

c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.

d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

e. "Weighted by flow value" means the summation of each sample concentration times its respective flow in convenient units divided by the sum of the respective flows.

f. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Federal Act.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Operation Monitoring Report Form (WQ 1.45). Such increased monitoring frequency shall also be indicated. The EPD may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained by the permittee for a minimum of three (3) years, or longer if requested by the State Environmental Protection Division.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges or pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the EPD of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Water Protection Branch of EPD with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage, runoff, or infiltration would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. The permittee shall monitor all overflows and bypasses in the sewer and treatment system. A record of each overflow and bypass shall be kept with information on the location, cause, duration, and peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

b. Halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Water Protection Branch of EPD.

3. Availability of Reports

Except for data determined by the Director of EPD to be confidential under Section 16 of the State Act or the Regional Administrator of the U. S. Environmental Protection Agency under Section 308 of the Federal Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Atlanta office of the EPD. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 22(b) of the State Act.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120 (D.D.C. 1976), if the effluent limitation so issued:

(1) is different in conditions or more stringent than any effluent limitation in the permit; or

(2) controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

Permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by any action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Available Technology Economically Achievable

Notwithstanding Part II, B-4 above, if an applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 301(b)2 of the Federal Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

14. The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

PART III

A. PREVIOUS PERMITS

1. All previous State water quality permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Water Pollution Control Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. SPECIAL REQUIREMENTS

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

2. Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also. The treatment and disposal procedures shall be discussed in the bi-annual flow characterization study.

3. The quantity of pollutants discharged in metal cleaning waste shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored 1/week by grab sampling when a discharge is occurring.

Effluent Characteristic	Discharge Limitation (mg/l)	
	Daily Average	Daily Maximum
Total Suspended Solids	30	100
Oil and Grease	15	20
Copper	1.0	1.0
Iron	1.0	1.0

4. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot operate at or below this level of chlorination. The permittee has demonstrated the need to continuously chlorinate the service water system to control asiatic clams. The present intent is to chlorinate the service water periodically from April through October, five days per month for 24 hours per day at an initial level of 1.0 mg/l FAC. Other months, longer durations, and lower FAC levels may be used. This chlorination practice will result occasionally in the discharge of FAC or TRC from each cooling tower simultaneously and for more than 2 hours per day. The permittee must reduce the chlorine discharge if possible and shall perform a study to determine the minimum practicable chlorine levels, frequencies, and duration of continuous chlorination for the service water system to adequately control asiatic clams. A plan of study with a schedule of activities must be submitted to the EPD within 90 days after the effective date of the permit and implemented upon approval.

5. In accordance with 40 CFR 423.11(k), the free available chlorine (FAC) average means the average over any individual chlorine release period of 2 hours per day per unit. The FAC maximum is the instantaneous maximum which may occur at any time. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC discharges. The results shall be reported in a suitably concise form beginning with the first scheduled Operation Monitoring Report (OMR) and continuing on each OMR thereafter.

6. In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in outfalls 01A, 04, 05, 06, and 07 (cooling tower blowdowns or overflows).

7. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.

8. The Director may modify any effluent limitation upon request of the permittee if such limitation is covered by an approved variance or by an amendment to the Federal Water Pollution Control Act.

9. The permittee shall determine the flow of the various waste streams and submit this determination to the Director once every two years.

10. All sewage treatment plants (STP) must be properly operated and maintained. This applies to 02A Main STP, 02B Coal Handling STP, 02C Unit 1 Temporary STP, and 02D Unit 2 Temporary STP.

11. Every two years, the permittee shall review the water treatment chemicals other than chlorine discharged to State waters. This includes, but is not limited to microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturers' instructions unless other requirements are imposed by EPD.

    As part of the flow characterization study of Item 13. below, the permittee shall submit to EPD a current inventory of all chemicals discharged during the previous twenty-four months.

12. Forms other than Form WQ 1.45 may be used for the quarterly Operation Monitoring Report upon approval by the EPD.

13. Summary of flow characterization study requirements from preceding pages:

    a. Outfalls 04, 05, 06, and 07 stop log leakage flow and effluent characteristics.

    b. Metal cleaning waste treatment and disposal procedures.

    c. Flow determination of various waste streams.

    d. Water treatment chemical inventory.

    e. Cooling tower blowdown priority pollutant certification per 40 CFR 423.13(d)(3).

Summary of NPDES Permit Rationale

Name Georgia Power Company - Plant Scherer NPDES No. GA 0035564

Location Monroe County Major Discharge _____

Minor Discharge X Date 12/29/86 Prepared by T. E. Hopkins

Draft permit is first issuance _____ reissuance with no modifications from previous permit _____ modification of existing permit X.

Discharge is industrial X municipal _____ privately owned (domestic wastewater only) _____. If industrial, point source category is 423 Steam Electric Power Generating subcategory is N/A production level is 3,272 megawatts, SIC code is 4911.

Facility located on stream segment that is and the basis for derivation of limitation is:

_____ Stream water quality limited
- _____ Based on water quality model
- _____ Based on instream calculation at 7 day, 10 year low flow

X Stream effluent limited
- X Based on promulgated guidelines
- _____ Based on plant's demonstrated performance
- _____ Based on demonstrated technology

Discussion:

See Following Pages:

GEORGIA POWER - PLANT SCHERER
SUMMARY OF NPDES PERMIT RATIONALE
DISCUSSION
GA 0035564

This permit is prepared in response to USEPA Region IV's January 15, 1986 letter and a revised partial Form 2C submitted by Georgia Power on May 5, 1986. Units 3 and 4 are included as existing sources. See also EPA's 7/29/86 and 11/4/86 letters and EPD's 9/9/86 and 12/29/86 responses.

01 I Pond Final Discharge and 01D I Pond Bottom Drain to Berry Creek: A daily max. TSS of 90 mg/l should be adequate to protect State waters and begin a track record at this outfall. A pH of 6.0-9.0 is required by 40 CFR 423. TRC monitoring is added to determine chlorine discharges during continuous service water chlorination for asiatic clam control.

01A Cooling Tower Blowdown for Units 1, 2, 3, 4: These are 40 CFR 423 regulated waste streams except under certain conditions as discussed. All requirements are derived directly from the Federal regulations. The "floating solids/visible foam" statement is deleted from this and other internal waste stream permit pages. Blowdown losses are made up from the service water system which is to be continuously chlorinated to control asiatic clams. See Part III. B. 4., Special Requirements. During clam control, chlorine will be discharged simultaneously from more than one unit and for more than 2 hours/day/unit. Allowable chlorine discharge concentration limits under these conditions is beyond the scope of the regulations. It is our best professional judgement (BPJ) that these chlorine (FAC) concentrations will not significantly exceed 0.2 mg/l average, 0.5 mg/l maximum at 01A. Further, the 01A waste stream passes through I-Pond (outfall 01) where chlorine dissipation will occur prior to entering the receiving stream. Therefore, specific numerical limits are not being established at this time. However, the chlorine minimization requirements of Part III. B. 4. and the permit modification provision of Part II. B. 8. (which is to be implemented as indicated in the 03 discussion below) will adequately protect Berry Creek. Finally, priority pollutant certification will be required every two years in the flow characterization study.

01B Ash Transport Water (includes 02H, Wastewater Basin Low Volume Wastes): On May 5, 1986, Georgia Power submitted information which enables an ash pond volume test calculation per the August 22, 1985 USEPA Guidance Memo. The calculation (attached) indicates that dilution does not occur and the 40 CFR 423 limitations can be applied without reduction.

02J Settling Pond Emergency Overflow to Lake Juliette: This may be considered a discharge of ash transport water to a water of the U.S. The applicable limits for TSS, Oil and Grease, and pH are taken from 40 CFR 423.

02K Wastewater Basin Emergency Overflow: This may be considered a discharge of low volume wastewater to Lake Juliette, a water of the U.S. Therefore, TSS, O&G, and pH limits are taken from 40 CFR 423. This basin serves Units 1 and 2.

02L Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes): This basin serves Units 3 and 4. Permit requirements are identical to 02K above.

03 Service Water Final Discharge to Lake Juliette: This discharge is analogous to once-through, non-contact cooling water. The pollutants which are to be regulated are temperature and chlorine. The discharge consists of miscellaneous cooling water flows and pump bleedoff, none of which pass through the main condensers. This waste stream is not covered in 40 CFR 423, so effluent limits are based on BPJ. Georgia Power expects no significant rise in temperature and will verify by measurements in the lake. This assumption is consistent with our experience with other once-through, non-contact, non-condenser cooling waters. Therefore, periodic monitoring without limits is adequate. After sufficient monitoring data are obtained, we may add limits if W.Q. standards are being violated. Chlorine from control of normal biofouling and asiatic clams will be discharged at 03. Therefore, TRC monitoring will be imposed. This monitoring will document existing control of chlorination and discourage over-use. Reductions in TRC discharge will be required if EPD documents TRC toxicity in the receiving water. This approach is consistent with our developing statewide strategy for controlling and abating TRC toxicity.

04 and 05 Unit 1 and Unit 2 Cooling Tower Basin Overflows to Lake Juliette, including Basin Cleaning Wastes: Cooling tower basin overflows are analogous to cooling tower blowdowns, so limits for FAC, TRC, chrome and zinc are imposed from 40 CFR 423. Also, see above discussion in 01A regarding chlorine discharges during asiatic clam control. Similar requirements apply to 04, 05, 06, and 07. Basin cleaning wastes are low volume wastes, so the 423 limits for TSS and O&G are used. These waste streams discharge directly to a water of the U.S., requiring pH limitations per Part 423. A compliance inspection verified that stop log leakage is insignificant. No monitoring is required and periodic review in the bi-annual flow charac. study is adequate to control leakage. Priority pollutant certification is allowed as in the provisions of 01A Cooling Tower Blowdown.

06 and 07 Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond): Limitations for these waste streams are written as 04 and 05, except that "I Pond" is not a water of the U.S. Therefore, pH monitoring is not required. The pH of the final discharge is limited at 01/01D, the "I Pond" outfalls.

Special Requirements See Part III. B

1. PCB's: The statement from 423 is repeated.

2. & 3. Metal Cleaning Wastes: The BPT/BAT provisions are incorporated from 423. These wastes are not discharged to a U.S. water. Therefore, pH is not limited except at the final plant discharge.

4. FAC and TRC time and simultaneous discharge provisions: Part 413 is cited. The company has demonstrated the need to simultaneously discharge chlorine for more than 2 hours/day/unit during service water chlorination for clam control. The BAT numerical limitations for FAC in cooling tower blowdown (01A) do not apply under these circumstances. However, increased monitoring and chlorine minimization will protect water quality, as contemplated for verification by EPD toxics monitoring. The company will study and implement the most feasible chlorine minimization early in the life of the permit. Further, the company must develop a new format for reporting time of FAC and TRC discharges.

5. The FAC average and instantaneous maximum are specified here per 40 CFR 423.

6. Priority pollutants shall be certified absent in all cooling tower blowdowns/overflows every 2 years.

7. Combined discharges: Part 423 is cited re mass-based limits.

8. Modifications: Expands Part II.B.4. to specify that the company may request changes to limits.

9. Flow characterization study: Studies are to be done every two years.

10. Sewage treatment plants: All STP's (02A, 02B, 02C, 02D) are to be operated properly. These plants do not discharge directly to a U.S. water.

11. Water treatment chemicals other than chlorine: These are to be inventoried every two years.

12. Use of alternate report forms may be allowed.

13. Periodic reports to be included with flow charac. studies:

    a) Stop log leakage

    b) Metal cleaning

    c) Flows

    d) Water treatment chemicals

    e) C.T. blowdown certification

6/19/86 TEH

Plant Scherer
Ash Transport Water Effluent Limitations
Outfall 01B

Available Information

02H	Low Volume Wastes	8200 gpm =	11.81 MGD
02	Ash Transport Water	36,090 gpm (net) =	51.97
02E	Coal Pile Runoff	2,500 gpm =	3.6
02C, D	STP's	34 gpm ≈	0
			67.38 MGD

Ash Pond Area = Total Runoff Area = 490 acres

10 year 24-hour storm (10Y24H) = 5.8 inches
Annual rainfall = 44.77 inches

Calculations

Runoff from 10Y24H storm at a runoff coefficient of 1.0

$= (490 \text{ acres})(5.8 \text{ inches})(1 \text{ ft}/12 \text{ in})(43560 \text{ ft}^2/\text{acre})(7.48 \text{ gal}/\text{ft}^3)$

$= 77.2$ MG

Total ash pond volume for use of alternate approach

$= 144.6$ MG

$= 444$ A-Ft.

6/19/86 TEH

Case I

Ash pond water surface area (acres)	=	490
Average water depth when new	=	32.65 ft.
Subtract 2 units × 160 A-Ft/year × 4 years ÷ 490 acres	=	− 2.61 ft.
Average water depth available	=	30.0 ft.
Available volume	=	14,700 A-Ft

Since the pond volume exceeds the necessary storage volume of 444 A-Ft. required to use the alternate approach, only dry weather flows need to be used in calculating effluent limitations.

Sources	Flow (MGD)	Daily Average Limitations (mg/l)		Daily Maximum Limitations (mg/l)	
		TSS	O&G	TSS	O&G
Low Volume Wastes	11.81	30	15	100	20
Ash Transport Water	51.97	30	15	100	20
Flow Weighted Conc.	(63.78)	30	15	100	20
Effluent limitations for 01B		30	15	100	20

FISCAL YEAR 1987 NPDES PERMIT REVIEW
STATE: DE

FACILITY: Da. Power Company - P/Dart Scherer

NPDES # : GA 0035564

APPLICATION _____ DRAFT ✓ FINAL _____

____ NEW

____ MAJOR IND.

____ MAJOR MUN.

✓ MINOR PRI.

____ MODIFICATION (circle one: Major Ind/Mun. or Minor Pri.)

ROUTING: 1. DATE/RECEIVED 4/16/87

2. UNIT CHIEF lc 4/16

3. ASSIGNED TO Lisa DUE 4/26/87

4. UNIT CHIEF (IF Problems)

5. PERMITS CLERK

6. FINALS (PCS then File), DRAFTS (file)

COMMENTS:

ACTION TO BE TAKEN: file - letter written

Darlene/Lisa 5/1/87

COMPLETED BY: DATE:

Georgia Department of Natural Resources
205 Butler Street, S.E., Suite 1252, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
404/656-3500

Minor-P

April 6, 1987

Mr. Jack E. Ravan
Regional Administrator
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

RE: Georgia Power Company
Plant Scherer
NPDES Permit No. GA0035564

DE...

We have reviewed your January 28, 1987 letter regarding the latest draft permit for Plant Scherer. We have carefully considered your suggestions. We have incorporated all the significant changes in the attached final permit. Please refer to page 3 (01A), page 9 (04 and 05), page 10 (06 and 07), and Part III. B.4. Special Requirements on page 19.

The assistance provided by your office in this matter has been greatly appreciated. We look forward to expeditious re-issuance of the remaining power plant permits during 1987.

Sincerely,

J. Leonard Ledbetter
Commissioner

JLL:thb

Attachment

cc: Mr. W. R. Woodall, Jr.

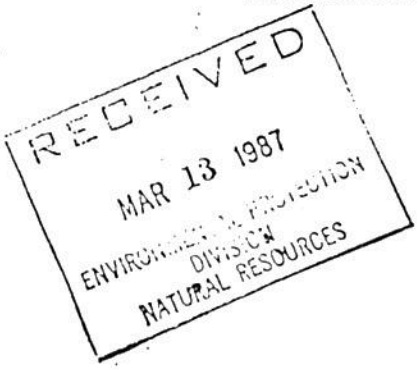
Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-6526

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

Georgia Power
the southern electric system

W. R. Woodall, Jr.
Manager
Environmental Affairs

March 5, 1987



PLANT SCHERER
NPDES Permit No. GA 0035564

Mr. H. F. Reheis, P.E.
Assistant Director
Environmental Protection Division
Georgia Department of Natural Resources
205 Butler Street, S.E.
Floyd Towers East
Atlanta, Georgia 30334

Dear Mr. Reheis:

In your December 29, 1986 letter, you requested that we revise our May 5, 1986 discussion of our proposed chlorination practices at Plant Scherer. Based on the Draft NPDES permit issued with that letter and subsequent discussion with your staff, we submit the following modified chlorination proposal.

Georgia Power Company no longer plans to install and utilize dechlorination equipment on any of the Plant Scherer discharges. Therefore, all references to dechlorination and associated monitoring activities in the May 5, 1986 letter are rescinded.

We still propose to conduct the Corbicula control chlorination program as previously described. We do not plan to chlorinate the service water system nor the condenser/cooling tower systems for normal biofouling control at the same time that chlorination for Corbicula control is being conducted.

Normal service water and condenser/cooling tower chlorination will be performed approximately one hour per day per unit with no simultaneous discharge of FAC and/or TRC from the cooling tower blowdowns. Chlorine residuals for normal biofouling control will be within permit limits at the cooling tower blowdown and will not exceed two hours per day per unit for TRC.

We also have two comments on the December 29, 1986 Draft NPDES permit. On page 10 of 21, OSN 06 and 07, the first paragraph of the narrative, the second sentence, states "FAC, TRC, chromium, zinc and ph are required for cooling tower overflow. . .". The requirement for pH should be deleted because this is still an internal waste stream at this point and pH is monitored at OSN 01 - Final Plant Discharge to Berry Creek.

Page 19 of 21, Special Requirement 4 states that "The service water will be chlorinated periodically from April through October, . . .". Because these are general date periods we request that the wording of this requirement be changed as follows:

"The service water will be chlorinated periodically during times of the year when the presence of Corbicula in the intake water is likely to occur,. . ."

I hope that this clarification of our chlorination practices and incorporation of our comments will produce a mutually acceptable permit.

If you have questions or comments, please advise.

Yours very truly,

W. R. Woodall, Jr.

GNG:mp

cc: Mr. J. C. Dozier
Mr. T. E. Hopkins

PERMIT NO. GA 0035564

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Federal Act," and the Rules and Regulations promulgated pursuant to each of these Acts,

GEORGIA POWER COMPANY
Post Office Box 4545
Atlanta, Georgia 30302

is authorized to discharge from a facility located at

Scherer Steam Electric Generating Station
Georgia Highway 23
Juliette, Monroe County, Georgia 31406

to receiving waters Berry Creek and Rum Creek to the Ocmulgee River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on April 6, 1987.

This permit and the authorization to discharge shall expire at midnight, March 16, 1992.

Signed this 6th **day of** April, 1987.

Director,
Environmental Protection Division

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01 - Detention Pond (I Pond) Final Discharge to Berry Creek; 01D - I Pond Bottom Drain.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	-	90	1/Month	Grab	Final Discharge or Bottom Drain
Total Residual Chlorine (TRC)	-	-	-	-	3/day(1)	Grab	Final Discharge or Bottom Drain

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample at the final discharge to Berry Creek or at the bottom drain when discharging.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring and reporting of TRC is required only during continuous service water chlorination for controlling asiatic clams.

2. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01A - Cooling Tower Blowdown for Units 1, 2, 3 and 4.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l) Daily Max.	Avg.	Inst.Max.	Monitoring Requirements Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-
Free Available Chlorine (FAC)	-	0.2	0.5	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Blowdown Line
TRC Time (minutes/day/unit)	120	-	-	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Service Water
Total Chromium	0.2	-	-	1/Quarter	Grab	Blowdown Line
Total Zinc	1.0	-	-	1/Quarter	Grab	Blowdown Line

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower blowdown combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower blowdown from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III, B.4., 5., and 6., beginning on page 19.

3. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01B- Ash Transport Water (includes 02H Wastewater Basin Low Volume Waste).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location(1)
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Bleedoff
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Bleedoff

(1) Samples are to be taken upstream of the final detention pond (I Pond) at the ash transport bleedoff line.

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4. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02J - Settling Pond Emergency Overflow to Lake Juliette (Ash Transport Water).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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5. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02K - Units 1 and 2 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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6. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 02L - Units 3 and 4 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

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7. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 03 - Service Water Final Discharge to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Other Units(Specify)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Temperature	-	-	-	-	1/Week	Grab	(1)
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Grab	Final Discharge

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Temperature will be monitored and reported for the plant intake and the final discharge. The difference ("ΔT") between the intake and discharge temperature shall be calculated and entered on the monitoring report.

8. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 04 and 05 - Units 1 and 2 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/1)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-		-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, TRC Time, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/1 of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

9. During the period beginning effective date and lasting through March 16, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 06 and 07 - Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-		-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

TSS and O & G are required for basin cleaning waste discharges. FAC, TRC, TRC Time, chromium, and zinc are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before each individual cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations and monitoring requirements apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

Note: EPD as used herein means the Division of Environmental Protection of the Department of Natural Resources.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on an Operation Monitoring Report (Form WQ 1.45), postmarked no later than the 21st day of the month following the completed reporting period. The first report is due on July 21, 1987.
The EPD may require reporting of additional monitoring results by written notification. Signed copies of these, and all other reports required herein, shall be submitted to the following address:

Georgia Environmental Protection Division
Industrial Wastewater Program
205 Butler Street, S.E., Floyd Towers East
Suite 1070
Atlanta, Georgia 30334

3. Definitions

a. The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

b. The "daily maximum" discharge means the total discharge by weight during any calendar day.

c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.

d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

e. "Weighted by flow value" means the summation of each sample concentration times its respective flow in convenient units divided by the sum of the respective flows.

f. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Federal Act.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Operation Monitoring Report Form (WQ 1.45). Such increased monitoring frequency shall also be indicated. The EPD may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained by the permittee for a minimum of three (3) years, or longer if requested by the State Environmental Protection Division.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges or pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the EPD of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Water Protection Branch of EPD with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage, runoff, or infiltration would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. The permittee shall monitor all overflows and bypasses in the sewer and treatment system. A record of each overflow and bypass shall be kept with information on the location, cause, duration, and peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

b. Halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Water Protection Branch of EPD.

3. Availability of Reports

Except for data determined by the Director of EPD to be confidential under Section 16 of the State Act or the Regional Administrator of the U. S. Environmental Protection Agency under Section 308 of the Federal Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Atlanta office of the EPD. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 22(b) of the State Act.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120 (D.D.C. 1976), if the effluent limitation so issued:

(1) is different in conditions or more stringent than any effluent limitation in the permit; or

(2) controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

Permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by any action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Available Technology Economically Achievable

Notwithstanding Part II, B-4 above, if an applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 301(b)2 of the Federal Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

14. The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

PART III

A. PREVIOUS PERMITS

1. All previous State water quality permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Water Pollution Control Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. SPECIAL REQUIREMENTS

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

2. Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also. The treatment and disposal procedures shall be discussed in the bi-annual flow characterization study.

3. The quantity of pollutants discharged in metal cleaning waste shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored 1/week by grab sampling when a discharge is occurring.

Effluent Characteristic	Discharge Limitation (mg/l)	
	Daily Average	Daily Maximum
Total Suspended Solids	30	100
Oil and Grease	15	20
Copper	1.0	1.0
Iron	1.0	1.0

4. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot operate at or below this level of chlorination. The permittee has demonstrated the need to continuously chlorinate the service water system to control asiatic clams. The present intent is to chlorinate the service water periodically from April through October, five days per month for 24 hours per day at an initial level of 1.0 mg/l FAC. Other months, longer durations, and lower FAC levels may be used. This chlorination practice will result occasionally in the discharge of FAC or TRC from each cooling tower simultaneously and for more than 2 hours per day. The permittee must reduce the chlorine discharge if possible and shall perform a study to determine the minimum practicable chlorine levels, frequencies, and duration of continuous chlorination for the service water system to adequately control asiatic clams. A plan of study with a schedule of activities must be submitted to the EPD within 90 days after the effective date of the permit and implemented upon approval.

5. In accordance with 40 CFR 423.11(k), the free available chlorine (FAC) average means the average over any individual chlorine release period of 2 hours per day per unit. The FAC maximum is the instantaneous maximum which may occur at any time. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC discharges. The results shall be reported in a suitably concise form beginning with the first scheduled Operation Monitoring Report (OMR) and continuing on each OMR thereafter.

6. In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in outfalls 01A, 04, 05, 06, and 07 (cooling tower blowdowns or overflows).

7. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.

8. The Director may modify any effluent limitation upon request of the permittee if such limitation is covered by an approved variance or by an amendment to the Federal Water Pollution Control Act.

9. The permittee shall determine the flow of the various waste streams and submit this determination to the Director once every two years.

10. All sewage treatment plants (STP) must be properly operated and maintained. This applies to 02A Main STP, 02B Coal Handling STP, 02C Unit 1 Temporary STP, and 02D Unit 2 Temporary STP.

11. Every two years, the permittee shall review the water treatment chemicals other than chlorine discharged to State waters. This includes, but is not limited to microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturers' instructions unless other requirements are imposed by EPD.

    As part of the flow characterization study of Item 13. below, the permittee shall submit to EPD a current inventory of all chemicals discharged during the previous twenty-four months.

12. Forms other than Form WQ 1.45 may be used for the quarterly Operation Monitoring Report upon approval by the EPD.

13. Summary of flow characterization study requirements from preceding pages:

    a. Outfalls 04, 05, 06, and 07 stop log leakage flow and effluent characteristics.

    b. Metal cleaning waste treatment and disposal procedures.

    c. Flow determination of various waste streams.

    d. Water treatment chemical inventory.

    e. Cooling tower blowdown priority pollutant certification per 40 CFR 423.13(d)(3).

Georgia Department of Natural Resources
205 Butler Street, S.E., Suite 1252, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
404/656-3500

April 6, 1987

Mr. Jack E. Ravan
Regional Administrator
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

RE: Georgia Power Company
Plant Scherer
NPDES Permit No. GA0035564

Dear Mr. Ravan:

We have reviewed your January 28, 1987 letter regarding the latest draft permit for Plant Scherer. We have carefully considered your suggestions. We have incorporated all the significant changes in the attached final permit. Please refer to page 3 (01A), page 9 (04 and 05), page 10 (06 and 07), and Part III. B.4. Special Requirements on page 19.

The assistance provided by your office in this matter has been greatly appreciated. We look forward to expeditious re-issuance of the remaining power plant permits during 1987.

Sincerely,

J. Leonard Ledbetter
Commissioner

JLL:thb

Attachment

cc: Mr. W. R. Woodall, Jr.